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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/092,335 | 03/06/2002 | George Robert Hulse | FMO P-3127-2 | 8988 |
| 29318 | 7590 | 06/29/2004 | EXAMINER | |
| JAMES D. STEVENS REISING, ETHINGTON, BARNES, KISSELLE, P.C. P.O. BOX 4390 TROY, MI 48099 | | | SONG, SARAH U | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2874 | |

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

10/092,335

Applicant(s)

HULSE ET AL.

Examiner

Sarah Song

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 1-27 is/are allowed.
6) ☒ Claim(s) 28-31 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 06 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 3, 2004 has been entered.

2. Applicant's communication filed on May 3, 2004 has been carefully studied by the Examiner. The arguments advanced therein, considered together with the amendments made to the claims, are persuasive and the rejections based upon prior art made of record in the previous Office Action are withdrawn. Claims 1-15, 21, 22 and 28-31 have been amended. Claims 1-31 are pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

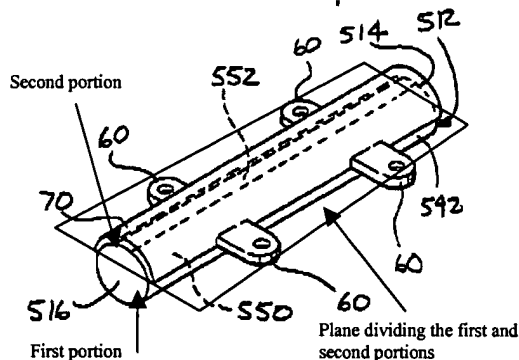
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hulse (WO 00/42456 newly cited).** Regarding claim 28, Hulse discloses an illuminating waveguide comprising:

- an elongated solid light transmitting body 512 having:

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- a first portion extending lengthwise along said body and having a light transmissive surface (surface opposite reflective coating 70),
- and
- a second portion extending lengthwise along said body;
- mounting features 60 located proximate the intersection of said first and second portions of said light transmitting body, at least two of said mounting features being spaced from each other (see figure) and extending laterally away from said body; and
- a reflective coating 70 on said second portion extending circumferentially from one of said mounting features to another of said mounting features;
- wherein said first portion has a first cross-sectional shape and said second portion has a second cross-sectional shape which directs internally-reflected light towards said first portion for transmission out of said body through said light transmissive surface (see page 9, lines 4-16).

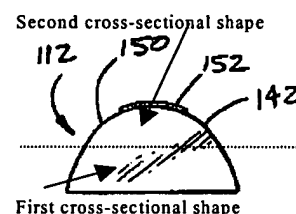


5. Hulse does not specifically disclose the second cross-sectional shape of the body 512 to be different in shape than said first cross-sectional shape.

6. Hulse discloses alternative embodiments wherein the elongated solid light transmitting body may have the structures as shown in Figure 3 or 4.

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7. Figure 3, for example shows the cross-sectional shape of the elongated solid light transmitting body, comprising different first and second cross-sectional shapes.



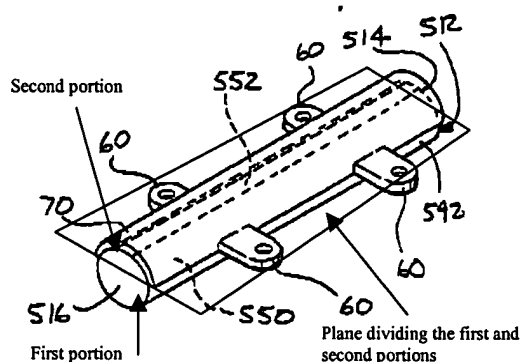
8. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the body 512 having the alternative shape, shown in Figure 3 of Hulse, comprising the first and second portions having different cross-sectional shapes..

9. The motivation to do so would have been to intensify the light directed out of the light transmitting body in order to provide brighter illumination to the interior of the vehicle body as taught by Hulse (see page 7, lines 16-25).

10. Regarding claim 29, the mounting features are elongated flanges 60 that are integrally formed with said body (see page 8, line 28 through page 9, line 4), said flanges extending lengthwise along at least a portion of said body 512 (see Figure 7).

11. Regarding claim 30, Hulse discloses an illuminating waveguide comprising:

- an elongated solid light transmitting body 512 having:
 - o a first portion extending lengthwise along said body and having a light transmissive surface (surface opposite reflective coating 70), and
 - o a second portion extending lengthwise along said body;



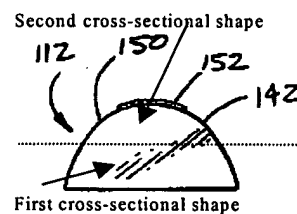
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- a plurality of mounting features 60 each extending laterally away from said body from a distal end to a free end;
- wherein said free ends of at least two of said mounting features are spaced from each other with said body 512 being located within the space between said free ends (see figure); and
- wherein said first portion has a first cross-sectional shape and said second portion has a second cross-sectional shape which directs internally-reflected light towards said first portion for transmission out of said body through said light transmissive surface (see page 9, lines 4-16).

12. Hulse does not specifically disclose the second cross-sectional shape of the body 512 to be different in shape than said first cross-sectional shape.

13. Hulse discloses alternative embodiments wherein the elongated solid light transmitting body may have the structures as shown in Figure 3 or 4.

14. Figure 3, for example shows the cross-sectional shape of the elongated solid light transmitting body, comprising different first and second cross-sectional shapes.



15. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the body 512 having the alternative shape, shown in Figure 3 of Hulse, comprising the first and second portions having different cross-sectional shapes.

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16. The motivation to do so would have been to intensify the light directed out of the light transmitting body in order to provide brighter illumination to the interior of the vehicle body as taught by Hulse (see page 7, lines 16-25).

17. Regarding claim 31, the mounting features are elongated flanges 60 that are located proximate the intersection of said first (transmissive) and second (reflective) portions of said body as noted in paragraph 5 above with respect to claim 28, said flanges extending lengthwise along at least a portion of said body 512 (see Figure 7).

Allowable Subject Matter

18. Claims 1-27 are allowed.

19. The following is a statement of reasons for the indication of allowable subject matter: Hulse discloses the illuminating waveguide to provide an intense, directed beam of light (see page 7, line 4 through page 8, line 6. Claims 1 and 15, however recite the limitation for light being diffusely transmitted through the light transmissive first surface. Therefore, Hulse teaches away from an illuminating waveguide wherein light is diffusely transmitted through the first surface. Therefore, claims 1 and 15 are allowable over Hulse. Claims 2-14 and 16-27 as depending from claim 1 or 15.

Response to Arguments

20. Applicant's arguments with respect to claims 1-31 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

21. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various


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claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah Song whose telephone number is 571-272-2359. The examiner can normally be reached on M-Th 7:30am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on 571-272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Sarah Song
Patent Examiner
Group Art Unit 2874